

CLAIMS:

1. Electro luminescent display panel (2) comprising a substrate (7) and a plurality of display pixels (3) including an electroluminescent material defined on or over said substrate, wherein said display panel further includes at least one microcontact printed hydrophobic layer (11) between at least some adjacent display pixels (3).
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2. Electro luminescent display panel (2) according to claim 1, wherein said hydrophobic layer (11) is a self-assembling monolayer.
3. Electro luminescent display panel (2) according to claim 1, wherein said
10 substrate (7) is a flexible substrate.
4. Electro luminescent display panel (2) according to claim 1, wherein said display panel (2) further comprises first and second electrodes (8,13) for said display pixels (3) and a protection layer (6) isolating said first from said second electrodes (6,13) between
15 said display pixels (3).
5. Electro luminescent display panel according to claim 4, wherein said microcontact printed hydrophobic layer (11) is defined on or over at least a part of said protection layer (11).
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6. Electro luminescent display panel according to claim 5, wherein said microcontact printed hydrophobic layer (11) exposes a part (6A) of said protection layer (6) to said electroluminescent material (12).
- 25 7. Electric device (1) comprising an electroluminescent display panel (2) according to any one of the preceding claims.
8. Method for manufacturing an electroluminescent display panel (2) comprising the steps of:

- providing a substrate (7);
- providing a hydrophobic layer (11) on or over said substrate by microcontact printing.

9. Method according to claim 8, wherein said method further comprises the steps
5 of:

- providing first electrodes (8) on or over said substrate (7);
- providing a protection layer (6) on or over said first substrate (7);
- patterning said protection layer (6) to determine display pixel areas (3);
- providing said hydrophobic layer (11) between said display pixel areas (3) by
10 microcontact printing.

10. Method according to claim 8 or 9, wherein said method further comprises the
steps of:
depositing at least one electroluminescent material (12) over said substrate (7);
15 providing a metallic layer (13) on or over at least said electroluminescent material (12).

11. Method according to claim 8, wherein said hydrophobic layer is obtained by
fluorinating a microcontact printed layer (11).

20 12. Method according to any one of the claims 8-11, wherein said hydrophobic
layer (11) is microcontact printed on an inorganic layer, such as SiO₂ or ITO.

13. Method according to claim 12, wherein said hydrophobic layer (11) is
trimethoxy(3,3,3-trifluoropropyl)silane.
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14. Method according to any one of the claims 8-11, wherein said hydrophobic
layer is microcontact printed on a polymer layer.

15. Method according to claim 14, wherein said hydrophobic layer is obtained by
30 the steps of:

- microcontact printing of poly(tert-butylacrylate) on a polyethylene layer;
- wet-chemical treatment of said poly(tert-butylacrylate) to yield a polyacrylic acid
hyperbranched film;
- fluorination of at least a part of said polyacrylic acid hyperbranched film.

16. Method according to claim 14, wherein said hydrophobic layer is obtained by the steps of:

- 5 - providing a polyelectrolyte stack of polyamine layers on a hydrophilic polystyrene layer
- microcontact printing of a polystyrene-block-polyacrylic-acid on an exposed polyamine layer of said polyelectrolyte stack;
- fluorination of said polystyrene-block-polyacrylic-acid.

10 17. Method according to claim 14, wherein said hydrophobic layer is obtained by the steps of:

- providing a hydrophilic polystyrene layer;
- microcontact printing of poly(lactic acid)-poly(ethylene glycol) on said polystyrene layer.